



MUNICIPALITY OF LOIZA

PO Box 508

Loíza, PR 00772-0508

Honorable Eddie M. Manzo Fuentes

Mayor

NOTICE OF INTENT

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
(NPDES) PHASE II, REGULATED SMALL MUNICIPAL SEPARATE
STORM SEWER SYSTEMS (MS4's)**

GENERAL PERMIT

**MUNICIPALITY OF LOIZA
EPA REGION 2 PUERTO RICO**

PREPARED BY RIQUEL

REVIEW BY MUNICIPALITY OF LOIZA

AUGUST 2009



Estado Libre Asociado de Puerto Rico

MUNICIPIO DE LOÍZA
Oficina del Alcalde

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Eddie M. Manso Fuentes
Alcalde

August 11, 2009

Carl Axel P. Soderberg
Director
Caribbean Environmental Protection Division
United States Environmental Protection Agency
Multi-Media Permits and Compliance Branch
Centro Europa Building, Suite 417
1492 Ponce De León Avenue
San Juan, PR 00907

**Notice of Intent for General Permit for Discharges from Small Municipal Separate
Storm Sewer Systems**

Dear Mr. Soderberg:

In compliance with the provisions of the Clean Water Act, the Municipality of Loíza must submit a Notice of Intent to obtain the authorization to discharge pollutants to waters of the United States in accordance with the conditions and requirements set forth in 40 CFR 122.33.

It is our privilege to present to the EPA, Loíza's Notice of Intent to obtain the NPDES permit for the municipality's Storm Sewer System Discharge.

If you need more information, you can contact Mr. José Miguel Figueroa, Director of the Department of Transportation and Public Works at (787) 876-3242.

Sincerely,

Hon. Eddie M. Manso Fuentes
Mayor

EXECUTIVE SUMMARY

The content of this report was created based on the research performed with local environmental agencies in Puerto Rico and information gathered thru meetings with community representatives from the Municipality of Loíza.

The Storm Water Notice of Intent presented in this report includes general information on the permittee, the nature of their business, a description of the characteristics and hydrology of the Loíza municipality, person(s) responsible for implementing the plan and the MS4 main users.

INTRODUCTION

In 1987 the Environmental Protection Agency (EPA) amended the Clean Water Act (CWA), requiring the implementation of a two phase program for addressing storm water discharges. On December 9, 1999 EPA published the second phase of the storm water regulations (64 FR 68721). As outlined in these regulations, municipal separate storm sewer systems (MS4's) serving populations of more than 50,000 and/or processing a density of 1000 people per square mile are required to obtain a General Phase II National Pollutant Discharge Elimination System (NPDES) Permit. The EPA is yet to issue a general NPDES Phase II permit for regulated MS4s. The EPA is requesting municipal storm sewer operators to apply for an individual NPDES permit as required by 40 CFR 122.33.

The Municipality of Loíza is required to submit an application for permit coverage. We hereby present to the EPA, Loíza's Notice of Intent (NOI) to obtain the general NPDES permit for the municipality's storm sewer system discharge.

PERMITTEE GENERAL INFORMATION

The Loíza MS4 is currently owned and operated by the municipality under the direction of its mayor, Hon. Eddie M. Manzo Fuentes. The Department of Transportation and Public Works, DTPW, will be the office responsible to implement and uphold the proposed storm water program. Mr. José Miguel Figueroa, director of DTPW, will be the person responsible for assuring the program maintains its proposed schedule.

The Municipality of Loíza is located in the north-east of the island at Latitude 18° 25' 11" North, 65° 52' 23" West. It has a territorial extension of fifty two (52) square miles. Loíza is bounded on the north with the Atlantic Ocean; south with Canóvanas Municipality; west with Carolina Municipality; and on the east with Río Grande Municipality.

Loíza possesses a population of 32,537 inhabitants, according to the 2000 Census.

Loíza is divided into six (6) wards: Torrecillas Alta, Torrecillas Baja, Canóvanas, Medianía Baja, Medianía Alta and Pueblo.

Figure 1 below, shows the Loíza's wards distribution.



The soil associations of Loíza are Swamps-Marshed, Caguabo-Mucara-Naranjito and Cataño-Aguadilla.

The terrain is nearly uniformly level since it does not surpass 100 meters (328 feet) above sea level. It is located in a geographic region called the Coastal Plains of the North (the Atlantic coast). The rivers that cross the Loíza municipality are: Grande de Loíza and Herrera rivers, which serve as the border with the municipality of Río Grande; two lagoons also composed the loíza's hidrology system: the Piñones and La Torrecilla lagoons. La Torrecilla is shared with the municipality of Carolina. Great marshy extensions of land and three "caños" complete the hydrographic system.

Most of the surface waters of the north part of Loíza's urban area percolate into the soil. The rain overflow generated on the areas north of PR-187 drains directly to the sandy land. The Atlantic Ocean borders this whole area, but the area is separated of the sea by dunes of sand and therefore does not drain towards the sea by superficial overflow. During events of rain, rain water forms seasonal gaps in the low points of this area, until it either percolates or evaporates. Surface waters on the south part of Loíza's urban area (south of PR-187) runs towards marshy extensions of land (wetland areas).

Figure 2 depicts the municipality's hydrology.

ACTIVITIES SUBJECT TO NPDES PERMIT APPLICABILITY

The municipality of Loíza operates a municipal separate storm sewer system located in the urban area of the Municipality.

The municipal urban area has a population of 4,123 and a territorial extension of approximately 0.56 square miles.

The main users of the Loíza MS4 are residential communities. Approximately 5 schools, 1 hospital and 1 industrial lot have been identified within the delineated urban area of Loíza.

The primary pollutant sources of the Loíza MS4 are sediments, trash and illegal sanitary connections.

Grande de Loiza

Rio Herre



Figure 2: Loiza's Hydrology

Caño Gallardo

Caño Valdílica

Sistema de Canales

NAME, MAILING ADDRESS, AND LOCATION OF FACILITY FOR WHICH THE APPLICATION

Municipality of Loíza
PO Box 508
Loíza, PR 00772-0508
Tel: 787-876-1040

STANDARD INDUSTRIAL CLASSIFICATION (SIC) CODE

The SIC Code established by the federal Office of Management and Budget for public administration for local government activities is 9199.

OPERATOR NAME (S), ADDRESS (ES), TELEPHONE NUMBER (S)

Mr. José Miguel Figueroa
Director, Department of Transportation and Public Works
187 Street Km. 10.4, Medianía Baja Ward
Loíza, Puerto Rico
(787) 876-3242

PERMITS OR CONSTRUCTION APPROVALS RECEIVED OR APPLIED UNDER THE FOLLOWING PROGRAMS:

Resource Conservation and Recovery Act

None

Underground Injection Control under the Safe Drinking Water Act

None

NPDES Program under the Clean Water Act

None

Nonattainment Program under the Clean Air Act

None

National Emissions Standards for Hazardous Air Pollutants Preconstruction Approvals under the Clean Air Act

None

Ocean Dumping Permits under the Marine Protection Research and Sanctuaries Act

None

Dredge or Fill Permits under Section 404 of the Clean Water Act

None

Puerto Rico Environmental Quality Board (DS-1)

Permit to Transport Non-Hazardous Solid Wastes

Used Oil Generator Permit (AU-97-45-0168)

Puerto Rico Department of Natural Resources and the Environment

Permit to restore and clean water bodies.

STORM WATER SEWER MAP

The Municipality of Loíza Storm Water Sewer System in the urban area in general consist of a series of open channel culverts and catch basins, located within the right-of-way of municipal roads, interconnected by underground concrete pipes (18", 20", 24" and 36") which normally discharge to wetland areas or the Rio Grande de Loíza (Pueblo Ward). The Urban Area of the Loíza Municipality is mainly part of three watersheds. The Pueblo ward discharges into the Rio Grande de Loiza, the northern part of the urban area drains into the soil or evaporates and the southern part of the urban area discharges on wetland areas.

Watershed no. 1 consists of the Pueblo Ward area. This area discharges into Rio Grande de Loíza through four (4) discharge points.

Watershed no. 2 consists on the area north of PR-187. This area comprises Loíza Gardens Apartments, Santillana del Mar sector, Suarez Community, Medianía Alta sector, and Vieques Community. The rain overflow generated on these areas, drains directly into the soil. The Atlantic Ocean borders this whole area, but the area is separated of the sea by dunes of sand and therefore does not drain towards the sea by superficial overflow. During events of rain, rain water forms seasonal gaps in the low points of these areas, until it either percolates or evaporates.

Watershed no. 3 consists on the area south of PR-187. This area comprises Miñi Miñi Community, Santiago Apóstol sector, El Cabo Community, Estancias del Río sector, Palmarenas sector and the industrial lot. The rain overflow generated on these areas, drains towards marshy extensions of land (wetland areas).

Included in Figure 3, is a topographic map depicting the runoff behavior of the Loíza Urban Area.

NATURE OF THE BUSINESS

The mission of the Loíza municipality is to complete all units required by the Act of Autonomous Municipalities and to develop storm water system improvements, and sustainable urban developments.

ESTIMATED SQUARE MILEAGE SERVED BY THE MS4

The municipal urban area has a population of 4,123 and a territorial extension of approximately 0.56 square miles.

The municipality has a territorial extension of 65.71 miles of which 0.56 square miles are classified as urban area (for purposes of our MS4 management plan, only the delineated urban area is considered the service area of the municipality storm sewer system).

BEST MANAGEMENT PRACTICES

Minimum Control Measure 1 – Public Education and Outreach

- ❖ *School Educational Campaign*
- ❖ *Distribution of Storm Water Related materials: pamphlets, booklets, and flyers*

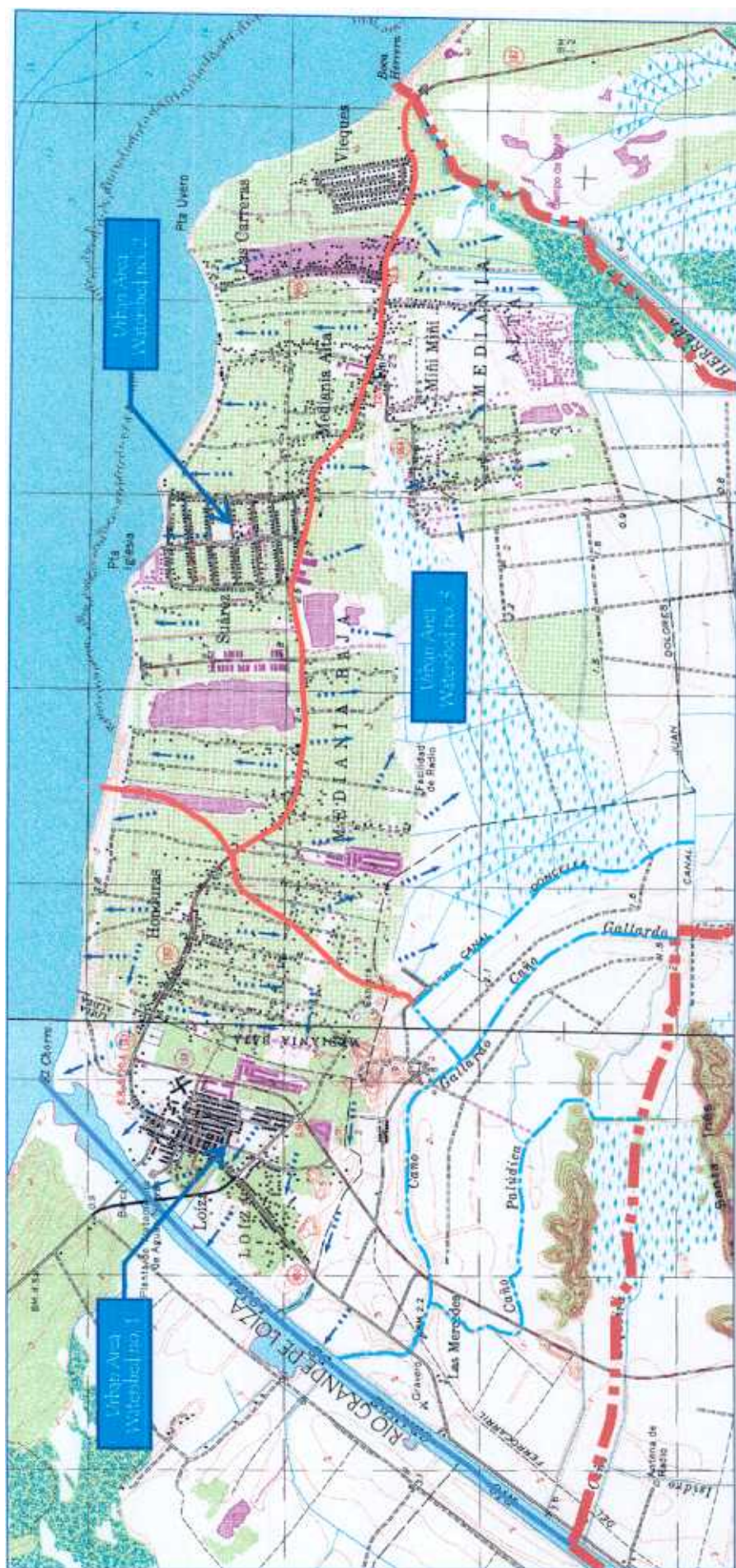




Figure 4 Loiza Watershed Area

- ❖ *Web Page*

Minimum Control Measure 2 – Public Involvement and Participation

- ❖ *Annual Cleanup (rivers, streams, catch basins)*
- ❖ *Reforestation Programs*

Minimum Control Measure 3 – Illicit Discharge Detection and Elimination

- ❖ *Storm sewer system map*
- ❖ *Program to detect, identify and eliminate illicit discharges*
- ❖ *Program to detect, identify and eliminate illegal dumping*
- ❖ *Program to detect, identify and eliminate wastewater connections to the storm drain system*
- ❖ *Program to detect, identify and eliminate sanitary sewer overflows*
- ❖ *Program to detect, identify and eliminate failing septic systems*

Minimum Control Measure 4 – Construction Site Storm Water Runoff Control

- ❖ *Site Inspection and Enforcement*
- ❖ *Require Electronic copies of Sanitary and Sewer Systems Layouts*
- ❖ *Inspection of Sanitary Sewer Connections*
- ❖ *Inspection and Enforcement of Storm Water Requirements at Construction Sites*
- ❖ *Procedures for reviewing construction site plans*

Minimum Control Measure 5 – Post Construction Storm Water Management in Development and Re-development

- ❖ *BMP Inspection and Maintenance*

Minimum Control Measure 6 – Pollution Prevention (Good Housekeeping for Municipal Operations)

- ❖ *Municipal Employees Training*
- ❖ *Street Cleaning Program*
- ❖ *Storm Drain System Cleaning Program*
- ❖ *Spill Response and Prevention Program*
- ❖ *Used Oil Recycling Program*
- ❖ *Recycling Program*
- ❖ *Vehicle Maintenance Program*

**PERSON RESPONSIBLE FOR IMPLEMENTING OR COORDINATING THE
APPLICANT'S STORM WATER MANAGEMENT PROGRAM**

Mr. José Miguel Figueroa

Director, Department of Transportation and Public Works

187 Street Km. 10.4, Medianía Baja Ward

Loíza, Puerto Rico

(787) 876-3242